

Application No.: 10/003,248

Docket No.: 21065-00160-US

**REMARKS**

The Office Action and prior art relied upon have been carefully considered. In the first instance, Applicant requests that the Examiner consider a withdrawal of the final rejection. On page 9 of the Office Action, it is stated that Applicant's amendment necessitated a new grounds of rejection rendering the last Office Action final. However, in the Office Action dated March 27, 2003, the Examiner allowed claims 1-6 and did not cited Boyce. Although, Ferreol-Ragotin was cited of general interest on page 9 of the Office Action, it was not applied to the claims.

It is Applicant's contention that the succeeding amendments have been relatively minor and that new prior art has been found by the Examiner, after an allowance of now rejected claims, the outstanding Office Action should not be regarding as Final. Accordingly, reconsideration is requested.

Applicant notes the allowance of claims 18-20 and the indicated allowability of claims 3, 4, 6, 14, 15, 17 and 22 with appreciation. The allowable but objected claims remain unordered so that a full consideration of their corresponding independent claims may be made.

Claims 1 and 12 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Boyce (US 5,988,364) in view of Ferreol-Ragotin (US 5,458,4331). A review of the Boyce reference shows that the quick connected/disconnected device of Boyce relies on the spring 40 forming retaining piston in a locked position as opposed to the balls of the presently claimed invention. More particularly, the claimed invention indicates that there is a lateral retaining surface displaying in an area of contact of each ball, a forced gradient such that under the effect of an axial thrust applied to the balls by the body through the load applied to the flange by the spring thrust element, the contact of each ball on the lateral retaining surface of the piston *maintains the piston in the locked position*.

Application No.: 10/003,248

Docket No.: 21065-00160-US

This is explained on page 14 of the present specification (page 13, line 31- page 14, line 16). The action of the three forced components to maintain the piston in a locked position, through the balls, is clearly shown in Fig. 5 of the present application.

There is no comparable locking action in the primary reference to Boyce. As clearly discussed in column 8, lines 49 – column 9, line 5, it is the spring 40 that maintains the balls in a locked position when the spring 40 undergoes compression and subsequent expansion as represented by Fig. 4, Fig. 5, and a return to Fig. 4.

The reference to Ferreol- Ragotin suffers similar short comings. In this reference, the piston is also submitted to the thrust force of a spring 15-15' and without this spring, the device cannot be locked.

The Examiner's attention is directed to column 3, lines 53-58 which explains that the expansion of compressed spring 15 moves the piston 12 axially in the shaft 11 ultimately resulting in the locking of the shaft in position within its sheath. Figs. 3 and 4 of the reference visually demonstrate this effect. Since both Boyce and Ferreol suffer from similar short comings relative to the claimed invention, their combination does not render the rejected claims obvious.

Concerning claims 2 and 13, the Examiner further relies upon the reference to Wekamp. This reference effectively shows a tapered washer biasing "piston" 12. However, this tapered washer, or any similar equivalent is not at all used in order bias the body of an anchoring device as is done in the present invention.

Applicant is fully aware that a Belleville washer, coil spring, or elastomeric member, such as ring 26 of Boyce, can be equivalent components when exerting an elastic force, specifically in an axial direction on a piston. However, it should be noted that the tapered washer or any other spring thrust element of the invention does not bias the piston, but the body of the device, as in Boyce.

Application No.: 10/003,248

Docket No.: 21065-00160-US

However, it should be likewise recalled that in Boyce the piston is not maintained in the locked position by the balls but by the spring 40, such spring action not being required in the present invention.

With respect to claims 5 and 16, Applicant wishes to note that the means 42 of Boyce are not designed for displacing the piston to an unlocked position. These means 42 are essentially stop means for the spring 40, and should be considered as a means for displacing the piston to the locked position. Unlocking is simply obtained by pushing against the spring loaded piston 36.

The secondary reference to Brewster illustrates a protruding outer end of the rod, but unlocking is also obtained by pushing the rod in a manner that is quite contrary to the present invention.

Accordingly, it is Applicant's position that none of the references cited individually or in any reasonable combination would render the claimed invention obvious.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Application No.: 10/003,248

Docket No.: 21065-00160-US

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 21065-00160-US from which the undersigned is authorized to draw.

Dated: May 18, 2004

Respectfully submitted,

By 

Morris Liss

Registration No.: 24,510

CONNOLLY BOVE LODGE &amp; HUTZ LLP

1990 M Street, N.W., Suite 800

Washington, DC 20036-3425

(202) 331-7111

(202) 293-6229 (Fax)

Attorney for Applicant